

NEW RECORDS FOR *PETRELAEA TOMBUGENSIS* (ROBER) (LEPIDOPTERA: LYCAENIDAE) IN QUEENSLAND

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Abstract

New records are provided for the distribution, biology and seasonal flight of *Petrelaea tombugensis* (Rober) in Queensland. The known distribution is extended south to El Arish, near Tully. *Terminalia catappa* L. and *T. muelleri* Benth. (Combretaceae) are recorded as probable larval hosts.

Introduction

Until recently, the genus *Petrelaea* Toxopeus was considered monotypic, but Fujioka and Chiba (1988) determined that it contained two closely related species, *P. dana* (de Niceville) and *P. tombugensis* (Rober).

P. dana is known from India, Nepal, Burma, the Andaman Islands, Sumatra, Borneo and Palawan and as far eastwards as the Moluccas (Parsons 1991). *P. tombugensis* ranges from the Andaman Islands, where the two species are sympatric, eastwards to Sula Mongoli, the Moluccas, mainland Papua New Guinea, New Britain, the Solomon Islands and the Northern Territory and Queensland in northern Australia (Parsons 1991).

Within Australia, the distribution, biology and seasonal flight period of *P. tombugensis* were poorly known (Common and Waterhouse 1981). Recent observations and collections in Queensland have significantly expanded current knowledge of this species.

Distribution

Common and Waterhouse (1981) recorded *P. tombugensis* (as *P. dana*) from two islands of the Torres Strait (Moa and Thursday) and as far south as Claudie River on the east coast of Cape York Peninsula. Collecting in Torres Strait by one of the authors (TAL) and others since 1984, has resulted in records of *P. tombugensis* from the following islands: Saibai, Boigu, Dauan, Murray, Darnley, Yorke, Stephen, Yam, Mt Ernest, Getullai, Tudu, Sue, Moa, Thursday, Horn and Hammond.

On mainland Queensland, specimens collected from the Cairns area (The Rocks, Palm Cove and Lower Freshwater) in November from 1986 to 1993 (by JO and CJM), and from El Arish in February 1997 (CJM), extend the range of this species south by approximately 640 km.

Biology

Throughout Torres Strait, both sexes of *P. tombugensis* are most often observed around blossoming *Terminalia catappa* L. and *T. muelleri* Benth. (Combretaceae). In northern Australia, *T. muelleri* is a common component

of vine thickets while *T. catappa* often occurs behind beach front communities. At El Arish *P. tombugensis* was collected around blossoming *T. catappa*, but all specimens from near Cairns were collected in lowland rainforest proximal to watercourses. Both sexes have a direct, fluttering flight and show increased activity during periods of sunlight. Adults of both sexes often perch on the foliage or feed at blossom of *Terminalia*. On Moa Island, Valentine and Johnson (1993) also noted adults of both sexes feeding on flowers of *T. catappa*. Near Cairns (The Rocks, Freshwater), males were collected at damp sand.

Females were observed ovipositing on *Terminalia catappa* blossom at El Arish and on Thursday Island *P. tombugensis* was observed on flower buds of both *T. catappa* and *T. muelleri*. Newly hatched larvae perished before reaching third instar for unknown reasons.

Observations of *P. tombugensis* near Cairns indicate that, in flight, the males bear a superficial resemblance to male *Erysichton lineata lineata* (Murray) and the females resemble those of *Prosotas* Druce and *Ionolyce helicon* (Felder), all of which fly with *P. tombugensis*.

Seasonal Flight

P. tombugensis has been recorded previously from January to April (Common and Waterhouse 1981; De Baar 1988; Dunn and Dunn 1991; Lachlan 1988; Lambkin and Knight 1990; Valentine and Johnson 1993; Waterhouse and Lyell 1914; Wood 1987). With the addition of recent records, *P. tombugensis* is now known to fly from September to May.

In Torres Strait, *P. tombugensis* may be common but almost always has been observed in association with *Terminalia* spp. In the Bulolo-Wau Valley of Papua New Guinea, Parsons (1991) considered *P. tombugensis* to be rare, as did Common and Waterhouse (1981) in Australia. Recent collecting in Torres Strait indicates that the supposed rare status is more likely due to a paucity of previous collection records.

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